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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 19514-2024

Replacing GB/T 19514-2009

**Method of measuring the luggage compartment volume of
passenger cars**

乘用车行李舱容积的测量方法

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Foreword

This document was drafted in accordance with the rules given in GB/T 1.1-2020 "Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents". This document replaces GB/T 19514-2004 "Passenger cars -- Luggage compartments - - Method of measuring reference volume". Compared with GB/T 19514-2004, in addition to structural adjustments and editorial changes, the main technical changes in this document are as follows:

a) The definitions of "luggage compartment", "unit module", "front luggage compartment", "rear luggage compartment that does not go through to the passenger compartment" and "rear luggage compartment that goes through to the passenger compartment" have been added (see 3.1, 3.3, 3.4,

3.6 of this Edition). The definition of reference volume of luggage compartment has been changed (see

3.2 of this Edition;

2.2 of Edition 2004);

b) The procedure has been deleted (see Chapter 3 of Edition 2004);

c) The specific requirements for unit modules have been changed (see Chapter 4 of this Edition;

2.1 of Edition 2004);

d) The code diagram for reference volume of luggage compartment (see Chapter 5 of this Edition), volume limits and codes for front luggage compartment (see

5.1 of this Edition), volume limits and codes for rear hidden closed reference volume of luggage compartment (see

5.2 of this Edition) have been added. The volume limits and codes of reference volume of rear luggage compartment that do not through to the passenger compartment (see

5.3 of this Edition; Chapter 4 of Edition 2004) and the volume limits and codes for reference volume of rear luggage compartment that go through to the passenger compartment (see

5.4 of this Edition; Chapter 4 of Edition 2004) have been changed;

e) The measurement methods have been added (see Chapter 6 of this Edition);

1 Scope

GB/T 19514-2024 specifies how the luggage compartment volume of a passenger car is measured. Boot capacity is quoted in every brochure and compared in every review, and left undefined it is a number a manufacturer can choose: measured to the parcel shelf or to the roof, with the seats up or folded, with the spare wheel in or out, with or without the awkward corners that nothing will actually fit into. This standard removes the choice. It defines the boundaries of the compartment and the conditions of the vehicle, the reference blocks used to fill it and their dimensions, the rules for stacking them and the spaces that may and may not be counted, the treatment of the load cover, the seat positions and the under-floor storage, the calculation of the volume from the blocks placed, and the reporting of the result. The 2024 edition replaces GB/T 19514-2009. For a carmaker publishing a figure in China, or anyone comparing two of them, this is the definition behind the number.

This document describes the unit modules used in measuring volume for passenger car luggage compartment, limits and codes for luggage compartment, measurement methods, and representation methods for reference volume of luggage compartment. This document is applicable to the measurement for reference volume of luggage compartment of M1 vehicles. Other types of vehicles shall follow the same procedure.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 3730.1, Terms and definitions of motor vehicles, trailers and combination vehicle -- Part 1: Types

GB/T 4780, Terms for motor vehicle body

GB/T 12673, Motor vehicle main dimensions measurement method

GB 15083, Strength requirement and test method of automobile seats, their anchorages

and any head restraints

3 Terms and definitions

For the purposes of this document, the terms and definitions defined in GB/T 3730.1, GB/T 4780 and GB/T 12673 and the followings apply to this document.

3.1 luggage compartment The space in the vehicle body for luggage. [Source: GB/T 4780-2020, 4.2.6]

3.2 reference volume of luggage compartment The maximum value of the sum of the volumes of the unit modules placed within the measurement limits of the luggage compartment. NOTE 1: It includes the reference volume of the front luggage compartment, the reference volume of the rear luggage compartment that goes through to the passenger compartment, the reference volume of the rear luggage compartment that does not go through to the passenger compartment and the reference volume of the hidden closed luggage compartment. NOTE 2: The unit is liter (L) or cubic decimeter (dm³).

3.3 unit module A rectangular block with standard dimensions, sufficient hardness and not prone to deformation is used to measure the reference volume of luggage compartment.

3.4 front luggage compartment Located at the front of the vehicle, storage space designed into the powertrain compartment.

3.5 rear luggage compartment that does not go through to the passenger compartment Rear storage space that is not connected to the passenger compartment (the luggage compartment partition is fixed and cannot be removed). NOTE: The reference volume of the rear hidden closed luggage compartment is included in the reference volume of the rear luggage compartment that does not go through to the passenger compartment.

3.6 rear luggage compartment that goes through to the passenger compartment Rear storage space connected to the passenger compartment (the luggage compartment partition can be removed, folded and stowed). NOTE: The reference volume of the rear hidden closed luggage compartment is included in the reference volume of the rear luggage compartment that goes through to the passenger compartment.

4 Unit modules

The unit module is a rectangular parallelepiped. The fillet radius of each edge shall not exceed 10 mm. The dimensional error shall not exceed ± 1 mm. The unit module has sufficient hardness and is not easily deformed. The size of each module model shall be adjusted, folded or removed, adjust it to the maximum reference volume of luggage compartment.

6.2 Measurement for reference volume of luggage compartment Use unit modules. Place unit modules according to the luggage compartment boundaries specified in Chapter 5 until

the luggage compartment is completely filled. There shall be no extrusion interference between the modules and the luggage compartment boundaries and the parts within the luggage compartment boundaries. The unit modules do not affect the normal opening and closing of the luggage compartment door. Each luggage compartment volume shall be measured three times. Take the maximum value as the measurement result and record it in Annex A.

7 Methods for expressing reference volume of luggage

compartment The reference volume of luggage compartment measured in accordance with Chapter 6 shall be expressed in the following elements and order:

- a) Name of reference volume of luggage compartment;
- b) Reference to this document: GB/T 19514-2024;